Title (en)

TEMPERATURE-MONITORED CHARGING SYSTEM FOR TRANSMITTING ELECTRIC CHARGE CURRENTS

Title (de)

TEMPERATURÜBERWACHTES LADESYSTEM ZUR ÜBERTRAGUNG VON ELEKTRISCHEN LADESTRÖMEN

Title (fr)

SYSTÈME DE CHARGE À SURVEILLANCE DE LA TEMPÉRATURE DESTINÉ À TRANSMETTRE DES COURANTS DE CHARGE ÉLECTRIQUES

Publication

EP 3526073 A1 20190821 (DE)

Application

EP 17784937 A 20171016

Priority

- DE 102016220110 A 20161014
- EP 2017076275 W 20171016

Abstract (en)

[origin: WO2018069542A1] The invention relates to a charging system (1) for transmitting an electric charge current to an energy receiver. The charging system (1) has the following: - a charge plug (10) for coupling to a corresponding connection device; - an electronic controller (31); and - at least one temperature sensor (12, 22) for determining the temperature of a current-conducting component (11, 20) of the charging system (1), wherein the temperature sensor (12, 22) is coupled to the electronic controller (31) in order to output temperature measurement data which represents the temperature of the current-conducting component (11, 20). The charging system (1) is characterized by the following features: - the charging system (1) additionally has an ambient temperature sensor (33) for determining the ambient temperature of the charging system (1); - the ambient temperature sensor (33) is coupled to the electronic controller (31) in order to output ambient temperature data which represents the ambient temperature of the charging system (1); and - the electronic controller (31) is designed to ascertain a differential temperature between the temperature of the current-conducting component (11) and the ambient temperature on the basis of the temperature measurement data and the ambient temperature measurement data and to output a control signal on the basis of the ascertained differential temperature in order to control the charge current.

IPC 8 full level

H01R 13/66 (2006.01); **H02J 7/04** (2006.01)

CPC (source: EP US)

B60L 53/16 (2019.02 - US); **B60L 53/18** (2019.02 - EP US); **B60L 53/302** (2019.02 - EP US); **B60L 53/62** (2019.02 - US); **B60L 53/68** (2019.02 - EP US); **H01R 13/6683** (2013.01 - US); **H02J 7/00309** (2020.01 - EP US); **H02J 7/0042** (2013.01 - EP US); **H02J 7/0045** (2013.01 - EP US); **H02J 7/0047** (2013.01 - EP US); **H02J 7/02** (2013.01 - EP US); B60L 2240/662 (2013.01 - EP); H01R 13/02 (2013.01 - EP); H01R 13/6683 (2013.01 - EP); H02J 2310/48 (2020.01 - EP US); Y02T 10/72 (2013.01 - EP); Y02T 90/16 (2013.01 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2018069542 A1 20180419; CN 109843636 A 20190604; CN 109843636 B 20220802; DE 102016220110 A1 20180419; EP 3526073 A1 20190821; EP 3526073 B1 20240221; US 11117479 B2 20210914; US 2019375309 A1 20191212

DOCDB simple family (application)

EP 2017076275 W 20171016; CN 201780063426 A 20171016; DE 102016220110 A 20161014; EP 17784937 A 20171016; US 201716341546 A 20171016